



US009636077B2

(12) **United States Patent**
Braun et al.

(10) **Patent No.:** **US 9,636,077 B2**
(45) **Date of Patent:** **May 2, 2017**

(54) **METHOD AND SYSTEM FOR THE
AUTOMATIC SELECTION OF A SCANNING
PROTOCOL**

(71) Applicant: **Siemens Aktiengesellschaft**, Munich
(DE)

(72) Inventors: **Christoph Braun**, Rosenheim (DE);
Dieter Böing, Forchheim (DE);
Christiane Koch, Eggolsheim (DE);
Robert Lapp, Nuremberg (DE);
Michael Scheuering, Nuremberg (DE);
Martin Sedlmair, Zirndorf (DE);
Grzegorz Soza, Heroldsberg (DE)

(73) Assignee: **SIEMENS**
AKTIENGESELLSCHAFT, Munich
(DE)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 127 days.

(21) Appl. No.: **14/487,265**

(22) Filed: **Sep. 16, 2014**

(65) **Prior Publication Data**

US 2015/0085971 A1 Mar. 26, 2015

(30) **Foreign Application Priority Data**

Sep. 25, 2013 (DE) 10 2013 219 249

(51) **Int. Cl.**
A61B 6/03 (2006.01)
A61B 6/00 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC **A61B 6/545** (2013.01); **A61B 6/032**
(2013.01); **A61B 6/0407** (2013.01); **A61B**
6/463 (2013.01);
(Continued)

(58) **Field of Classification Search**

CPC A61B 6/032; A61B 6/46; A61B 6/461;
A61B 6/465; A61B 6/5294; A61B 6/54;
A61B 6/541; A61B 6/542; A61B 6/545
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,400,378 A * 3/1995 Toth A61B 6/032
378/108
5,450,462 A * 9/1995 Toth A61B 6/032
378/108

(Continued)

FOREIGN PATENT DOCUMENTS

CN 101004764 A 7/2007
CN 101010039 A 8/2007

(Continued)

OTHER PUBLICATIONS

Office Action dated Apr. 25, 2016 in Chinese Patent Application No.
2014104957002.

Primary Examiner — Allen C. Ho

(74) *Attorney, Agent, or Firm* — Harness, Dickey &
Pierce, PLC

(57) **ABSTRACT**

A method is disclosed for automatically selecting a scanning
protocol for a tomographic recording of an X-ray image of
a patient in that at least one patient-specific value is retrieved
in the internal memory of a first computer. The patient-
specific value can in particular be a measure of the anti-
cipated X-ray absorption by the patient. The method includes
automatically comparing the patient-specific value with
retrievably stored reference values, wherein one scanning
protocol can be associated with each reference value.
Finally, a scanning protocol is automatically selected by way
of the first computer using the comparison. Selection is
simplified by automation of selection of the scanning pro-
tocol since no manual selection of the scanning protocol has

(Continued)

